

Ambulatory Pediatrics II. Personal Health Care of Children in the Office. Edited by Morris Green and Robert J. Haggerty. 500 pp. Illust. W.B. Saunders Company Canada Limited, Toronto, 1977. \$22.70. ISBN 0-7216-4236-5

There is nothing esoteric here. Green and Haggerty have produced a text in the tradition of "Pediatric Diagnosis" (2nd ed, Philadelphia, Saunders, 1962) by Green and Richmond. Specific problems in pediatrics are itemized in each chapter. The book lends perspective and describes the practice of general pediatrics as it really is.

The chapters are brief. Approximately 60 topics are discussed by a team of 42 experts from a variety of medical centres across the United States. A short list of current and historically important references follows each chapter.

There are three sections: the first two deal with the treatment and prevention of common organic and psychologic problems, and the concluding section includes a number of chapters devoted to the subjects of office management, business considerations and techniques of establishing and operating a successful practice. Pediatricians about to embark on a career in general private pediatrics will find this final section most useful.

The book is well laid out; the matter of the pages makes for easy reading and the various topics are easy to find. Each chapter covers a new topic and begins at the top of a new page. The print is clear and the headings are in bold face; the tables and figures are concise and few in number, and explain clearly the various subjects. One notable exception is a complex full-page flow-chart that explains the sequence of events to be followed in the proper investigation of a patient with suspected urinary tract infection.

An excellent example of the value of this book is the chapter by Fuller

entitled "Speech and hearing problems". He makes no attempt to give the details of treatment; instead, one is referred to an existent resource such as Lillywhite's review of normal language performance at successive age levels. In three pages Fuller provides the reader with an overview of the subject and general guidelines for patient evaluation and management. He recommends as office screening procedures the Denver articulation examination and the 50-item screening articulation test because they are based on a chronologic rating and are simple to administer. But the primary-care physician is given specific indications for referral of patients with dysfluencies to experts in child development, speech therapy and audiology. Fuller reminds us that audiologists can test children even in infancy and that there is no justification for postponing audiologic assessment because of age. Fuller's sentences are a précis of important information on complicated subjects. For example, he tells us that "by the time he reaches his eighth birthday, the average child will have mastered prosodic features and virtually all of the grammar of his natural language, and will have acquired mature articulation skills."

The book will be of special interest to persons entering practice and those preparing teaching seminars and lectures in practical pediatrics. It will serve the novice in the primary care of children as a guide in distinguishing the common from the unusual.

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Atlas of Strabismus Surgery. 2nd ed. Edited by Eugene M. Helveston, 262 pp. Illust. The C.V. Mosby Company, Saint Louis, 1977. \$37.30. ISBN 0-8016-2138-0

Eugene M. Helveston won critical acclaim in 1973 with his first edition of the "Atlas of Strabismus Surgery". For the first time ophthalmologists had at close hand an atlas that described

clearly and concisely the common surgical procedures performed on the extraocular muscles. This second edition follows a similar format. Following a summary of surgical anatomy, the author describes in detail the possible approaches to weakening and strengthening the extraocular muscles and their potential complications. On facing pages the text is complemented by excellent drawings and clinical photographs where applicable.

Of particular interest is the chapter entitled "A logical scheme for the planning of strabismus surgery", which includes an assessment of both the motor and sensory status, and offers a rationale for which muscles to assault and how much to do. Thereafter follows a series of aphorisms regarding surgical options that are very much to the point.

New material in this edition includes a chapter on the Faden operation (posterior fixation suture), adjustable sutures and synthetic absorbable sutures. Force generation testing is also described.

Practitioners and residents in ophthalmology not familiar with this book will enjoy it on first reading and find it a practical and comprehensive reference text.

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Clinical Physiology of Acid-Base and Electrolyte Disorders. Burton David Rose. 548 pp. Illust. McGraw-Hill, Inc., New York; McGraw-Hill Ryerson Limited, Scarborough, 1977. \$13.15, paperback. ISBN 0-07-053621-X

The author's approach to the subject of the physiology of body fluid and renal functions, and disorders of water, acid-base and electrolyte balance is presented in this easily readable book. The organization is good and subject matter clear.

The physiology of body fluid, renal physiology, and regulation of water and

Ventolin®

Indications To relieve bronchospasm in bronchial asthma of all types, chronic bronchitis, other chronic bronchopulmonary disorders in which bronchospasm is a complicating factor. **Contraindications** Hypersensitivity to any of the ingredients and tachyarrhythmias. Ventolin Respirator Solution is not recommended for use in children under 12 years of age, until the dose regimen and evidence concerning its safety have been established. **Warnings** The safety of salbutamol in pregnancy has not been established. Care should be taken with patients suffering from myocardial insufficiency, arrhythmia, hypertension, diabetes mellitus, or thyrotoxicosis. The use of Ventolin Respirator Solution by means of IPPV is not recommended until the safety and the dosage regimen for alternate methods of delivery have been established. Occasional patients have been reported to have developed severe paradoxical airway resistance with repeated excessive use of sympathomimetic inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of the preparations be discontinued immediately and alternate therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn. Fatalities have been reported following excessive use of sympathomimetic amines by inhalation, the exact cause of which is unknown. Cardiac arrest was noted in several instances. **Precautions** Use with caution in patients sensitive to sympathomimetic amines. Other beta-adrenergic drugs, e.g. isoprenaline should not be given concomitantly. **Adverse Reactions** An increase in heart rate may occur in patients who inhale large doses of Ventolin. No electrocardiographic changes were observed (Choo-Kang et al 1970). Other side effects which may occur with Ventolin are peripheral vasodilatation, fine tremor of skeletal muscles, headaches, dizziness, nausea, palpitation and unpleasant taste in the mouth. **Symptoms and Treatment of Overdosage** Overdosage may cause peripheral vasodilatation, and increased irritability of skeletal muscle, tachycardia, arrhythmia, hypertension and in extreme cases, sudden death. In case of overdosage, gastric lavage should be performed. In order to antagonize the effect of salbutamol, the use of a beta-adrenergic blocking agent, such as propranolol, may be considered. **Dosage and Administration** VENTOLIN INHALER: One or two inhalations repeated every four hours, if required. More than eight inhalations per day is not recommended. VENTOLIN TABLETS: All doses to be taken three or four times daily by children and adults. Adults, 2 mg - 4 mg. The optimum single doses for most adult patients is 4 mg. With elderly patients or with patients who are unusually sensitive to beta-adrenergic stimulants, it is advisable to initiate treatment with 2 mg. Children, 6-12 years - 2 mg; over 12 years - adult dosage. **Ventolin Respirator Solution** Ventolin Respirator Solution should be used only under medical supervision. It has been reported that the use of Intermittent Positive Pressure Ventilation in acute asthma attacks, in several cases was related to lethal episodes of hypoxia and pneumothorax. This method of drug administration may be ineffective in patients with severe obstruction and greatly increased airway resistance, and it may induce severe hypercapnia and hypoxia. During intermittent positive pressure ventilation therapy, the monitoring of arterial blood gases is highly desirable. **Adult Dosage** The average dose for a single treatment is 0.25 ml to 0.50 ml of Ventolin Respirator Solution (containing 1.25 to 2.5 mg of salbutamol), diluted in 5 ml or more of normal saline or distilled water. For more refractory cases, the single dose may be increased to 1 ml. Ventolin Respirator Solution is to be administered through intermittent positive pressure ventilation. The respiratory pressure is usually 10 - 20 cm H₂O and the duration of administration varies from 5 minutes up to 20 minutes dependent upon the patient and the control of the apparatus. Optimally, the duration of treatment is 10 to 15 minutes. The length of administration provides a more gradual and more complete lysis of bronchospasm. If acute bronchospasm persists, treatment may be repeated, at the physician's discretion, three times in 24 hours with a time interval of not less than 3 hours. **Children Dosage** Children over 12 years of age may be treated in the same fashion as adults, using a single dose of 0.25 ml of Ventolin Respirator Solution (containing 1.25 mg of salbutamol). Experience is insufficient for recommending the treatment of children under 12. **Presentation** VENTOLIN INHALER: A metered aerosol, delivering 100 mcg of salbutamol per inhalation. Each 15 ml canister provides at least 200 inhalations. VENTOLIN TABLETS: 4 mg. Each tablet contains salbutamol sulphate 4.8 mg, equivalent to salbutamol 4.0 mg. Bottles of 100 tablets. 2 mg. Each tablet contains salbutamol sulphate 2.4 mg, equivalent to salbutamol 2.0 mg. Bottles of 100 tablets. VENTOLIN RESPIRATOR SOLUTION: Contains salbutamol sulphate 0.6% in an aqueous solution, equivalent to 5 mg of salbutamol per ml. Benzalkonium chloride is used for preservative. Available in 15 ml, amber-coloured, glass bottles with neoprene stoppers and polypropylene screw caps. Each bottle contains 10 ml of Ventolin Respirator Solution and is presented in an individual carton with enclosed leaflet. For use in hospital, a 10 x 10 ml pack is available.

Beclovent®

Indications Treatment of steroid-responsive bronchial asthma: (1) In patients who in the past have not been on steroids but the severity of their condition warrants such treatment. (2) In steroid-dependent patients to replace or reduce oral medication through gradual withdrawal of systemic drugs. **Contraindications** Active or quiescent untreated pulmonary tuberculosis, or untreated fungal, bacterial and viral infections, and in children under six. Status asthmaticus, and in patients with moderate to severe bronchiectasis. **Warnings** In patients previously on high doses of systemic steroids, transfer to

BECLOVENT Inhaler may cause withdrawal symptoms such as tiredness, aches and pains, and depression. In severe cases, acute adrenal insufficiency may occur necessitating the temporary resumption of systemic steroids. The development of pharyngeal and laryngeal candidiasis is cause of concern because the extent of its penetration of the respiratory tract is unknown. If candidiasis develops the treatment should be discontinued and appropriate antifungal therapy initiated. The incidence of candidiasis can generally be held to a minimum by having patients rinse their mouth with water after each inhalation. **Precautions** (1) It is essential that patients be informed that BECLOVENT Inhaler is a preventive agent, must be taken at regular intervals, and is not to be used during an asthmatic attack. (2) The replacement of a systemic steroid with BECLOVENT Inhaler has to be gradual and carefully supervised by the physician. The guidelines under Dosage and Administration should be followed in each case. (3) Unnecessary administration of drugs during the first trimester of pregnancy is undesirable. Corticosteroids may mask some signs of infection and new infections may appear. A decreased resistance to localized infection has been observed during corticosteroid therapy. During long-term therapy, pituitary-adrenal function and hematological status should be periodically assessed. (4) Fluorocarbon propellants may be hazardous if they are deliberately abused. Inhalation of high concentrations of aerosol sprays has brought about cardiovascular toxic effects and even death, especially under conditions of hypoxia. However, evidence attests to the relative safety of aerosols when used properly and with ventilation. (5) There is an enhanced effect of corticosteroids on patients with hypothyroidism and in those with cirrhosis. (6) Acetylsalicylic acid should be used cautiously in conjunction with corticosteroids in hypoprothrombinaemia. (7) Patients should be advised to inform subsequent physicians of the prior use of corticosteroids. **Adverse Reactions** No major side effects attributable to the use of recommended doses of BECLOVENT Inhaler have been reported. No systemic effects have been observed when the daily dose was below 1 mg (twenty puffs). Above this dose, reduction of plasma cortisol, indicating adrenocortical suppression, may occur. Therapeutic doses may cause the appearance of Candida albicans in the mouth and throat. The replacement of systemic steroids with BECLOVENT Inhaler may unmask symptoms of allergies which were previously suppressed by the systemic drug. Conditions such as allergic rhinitis and eczema may thus become apparent during BECLOVENT therapy after the withdrawal of systemic corticosteroids. **Symptoms and Treatment of Overdosage** Overdosage may cause systemic steroid effects such as adrenal suppression and hypercorticism. Decreasing the dose will abolish these side effects. **Dosage and Administration** The optimal dosage of BECLOVENT may vary widely and must be individually determined, but the total daily dose should not exceed 1 mg of beclomethasone dipropionate (20 puffs). **ADULTS:** The usual dose is two inhalations (100 mcg) three to four times daily. If this dose is not sufficient, it can be doubled initially. As a maintenance dose, many patients do well on two inhalations daily. **CHILDREN:** Insufficient information is available to warrant the safe use in children under six years of age. The average daily dose for children over six years of age is 6 mcg/kg of body weight. **Important** As a steroid aerosol BECLOVENT Inhaler is for maintenance therapy. It is not intended to give immediate relief, and effectiveness depends on regular use and proper technique of inhalation. Patients must be instructed to take the inhalations at regular intervals and not, as with bronchodilator aerosols, when they feel a need for relief of symptoms. They should be instructed in the correct method of use, which is to exhale completely, then place the lips tightly around the mouthpiece. The aerosol should be actuated as the patient breathes in deeply and slowly. This ensures maximum penetration into the lungs, and the breath should be held as long as possible following each inhalation. The patient's attention should be drawn to the Instruction Sheet, enclosed with each BECLOVENT pack. In the presence of excessive mucus secretion, the drug may fail to reach the bronchioles. Therefore, if an obvious response is not obtained after ten days, attempts should be made to remove the mucus with expectorants and/or with a short course of systemic corticosteroid treatment. Careful attention should be given to patients previously treated for prolonged periods with systemic corticosteroids, when transferred to BECLOVENT. Initially, BECLOVENT and the systemic steroid must be given concomitantly while the dose of the latter is gradually decreased. The usual rate of withdrawal of the systemic steroid is the equivalent of 2.5 mg of prednisone every four days if the patient is under close observation. If continuous supervision is not feasible, the withdrawal of the systemic steroid should be slower, approximately 2.5 mg of prednisone (or equivalent) every ten days. If withdrawal symptoms appear, the previous dose of the systemic drug should be resumed for a week before further decrease is attempted. There are some patients who cannot completely discontinue the oral corticosteroid. In these cases, a minimum maintenance dose should be given in addition to BECLOVENT Inhaler. **Supplied** BECLOVENT Inhaler is a metered dose aerosol delivering 50 mcg of beclomethasone dipropionate with each depression of the valve. There are two hundred doses in a container. Official product monograph on request.

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electrolytes are reviewed in chapters 1 to 13. The accounts are not exhaustive but are comprehensive. In chapter 1 units of measurement are described clearly.

Chapters 14 to 27 are devoted to the subjects of acid-base balance, sodium abnormalities, osmolar problems, hypo- and hyperkalemia and diuretics. There is a fair amount of repetition, especially at the beginning of the chapter, but this may be of service for beginners in this field.

At the end of most chapters problems are presented that re-emphasize the important concepts, and one chapter contains a summary of important equations and formulas that would be very helpful in clinical settings.

Although it has an up-to-date bibliography this is by no means a reference book. However it would be useful to medical students, house staff and practising physicians, and candidates taking examinations, and anyone involved in teaching would benefit from it.

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Disturbances in Body Fluid Osmolality. Edited by Thomas E. Andreoli, Jared J. Grantham and Floyd C. Rector, Jr. 347 pp. Illust. American Physiological Society, Bethesda; Burns & MacEachern Limited, Don Mills, 1977. \$28.75. ISBN 0683-0026.4

This attempt to gather some of the conclusions of a symposium on disturbances in body fluids and osmolality into a single readable package has been successful, particularly for persons who have a special interest in this field. The stated dual aim is to provide a source of information for the physiologist concerned with processes that contribute to the regulation of body fluid osmolality, and to supply a useful reference for the clinician faced with the evaluation, diagnosis and management of patients afflicted with derangements in body fluid homeostasis.

The first nine chapters describe in great detail the molecular aspects of antidiuretic hormone and its action and role in body fluid homeostasis, and animal models for hypothalamic and nephrogenic diabetes insipidus. The data obtained by using newer methods of measurement of antidiuretic hormone are of great interest. However, reading may be difficult, if not tedious, for persons without special interest in the finer details, theories and facts about the source, regulation and action of antidiuretic hormone. Forty-four pages are devoted to references.

The last six chapters provide an approach to the classification of clinical disorders of body fluid homeostasis, and their diagnosis and management.